

FOUR NEW SPECIES OF NEMOTELUS FROM CHINA (DIPTERA, STRATIOMYIDAE)

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Abstract Four new species of *Nemotelus* are described: *N. dissitus* sp. nov., *N. faciflavus* sp. nov., *N. ventiflavus* sp. nov. and *N. xinjianganus* sp. nov. The type specimens are deposited in the Entomological Museum of China Agricultural University, Beijing.

Key words Diptera, Stratiomyidae, *Nemotelus*, new species, China.

Nemotelus is characterized by the body small-sized and black with the yellow marking, head with the distinctly projecting face, antennal flagellum 6-segmented, proboscis slender and scutellum without any spines (Rozkošný, 1983). It contains 190 known species from the world. Thirteen species are known from China. Here four new species are added to the fauna of China. The type specimens of new species are deposited in the Entomological Museum of China Agricultural University (CAU), Beijing.

1 *Nemotelus dissitus* sp. nov. (Figs. 1–3)

Female. Body length 5.1–5.3 mm, wing length 4.3–4.6 mm.

Head black except lower frons with yellow triangular lateral spots. Hairs on head pale. Head 0.9 times higher than long; eye width 0.4–0.5 times distance from antennae to median ocellus and 0.6–0.7 times that of frons just above antennae; frons width just above antennae 3.0–3.4 times that of ocellar triangle and 0.6–0.8 times that of frons at median ocellus. Antenna (flagellum broken) black with pale hairs; antennal ratio: 1.0: 1.2: ? . Proboscis brown.

Thorax black and slightly pale gray pollinose; humeri yellow. Mesopleuron with upper margin yellow. Hairs on thorax pale. Legs blackish brown, but apex of femora yellow; tibiae more or less yellow except hind tibia with median portion blackish; tarsi yellow. Hairs on legs pale. Wing hyaline; veins pale. Halter yellow.

Abdomen black except dorsum with yellow lateral margin, tergite 2 with three yellow spots on posterior portion, tergites 3–5 with narrow posterior portion yellow; sternite 1 with a yellow transverse narrow stripe, median portion of sternite 2 yellow with a black transverse spot, sternites 3–5 with narrow posterior margin yellow. Hairs on abdomen pale.

Male. Unknown.

Holotype ♀, paratype 1 ♀, Ganquan, Shaanxi, 16–23 June 1971, YANG Chi-Kun.

Distribution. China (Shanxi).

Etymology. The specific name refers to two yellow spots of the frons distinctly separated.

Remarks. This new species resembles *N. uliginosus* (Linnaeus), but it may be distinguished from the latter by the shorter rostrum with the somewhat obtuse apex (in *uliginosus*, rostrum longer with apical portion somewhat acute) and female frons with two yellow spots distinctly separated (in *uliginosus*, female frons with two yellow spots convergent forward) (Rozkošný, 1983).

2 *Nemotelus faciflavus* sp. nov. (Figs. 4–7)

Female. Body length 4.1 mm, wing length 3.4 mm.

Head black, but lower frons yellow except a median stripe brown and face yellow except oral margin brown. Head 0.7 times higher than long; eye width 0.5 times distance between antennae and median ocellus and 0.7 times that of frons just above antennae; frons width just above antennae 2.7 times that of ocellar triangle and 0.8 times that of frons at median ocellus. Antenna brown; scape, pedicel and apex of flagellum with pale hairs, last flagellomere 0.15 times as long as rest of flagellum; antennal ratio: 1.0: 1.3: 5.3. Proboscis brown.

Thorax black, but humeri and postalar calli yellow. Upper portion of mesopleuron, entire pteropleuron, upper portion of sternopleuron, and hypopleuron yellow; laterotergite yellow except hind margin black. Hairs on thorax pale. Legs brownish yellow, but apex of femora, base of tibiae, and tarsi pale yellow. Hairs on legs pale. Wing hyaline; veins pale. Halter pale yellow except basal portion brownish yellow.

Abdomen yellow, but tergite 1 with brownish transverse band on apical portion, tergites 2–5 with brownish transverse band on basal portion; sternites 1–4 with narrow lateral area brownish yellow. Hairs on abdomen pale.

Male. Unknown.

Holotype ♀, Moyu (1236 m), Xinjiang, 9 Sep. 1979, LI Fa-Sheng.

Distribution. China (Xinjiang).

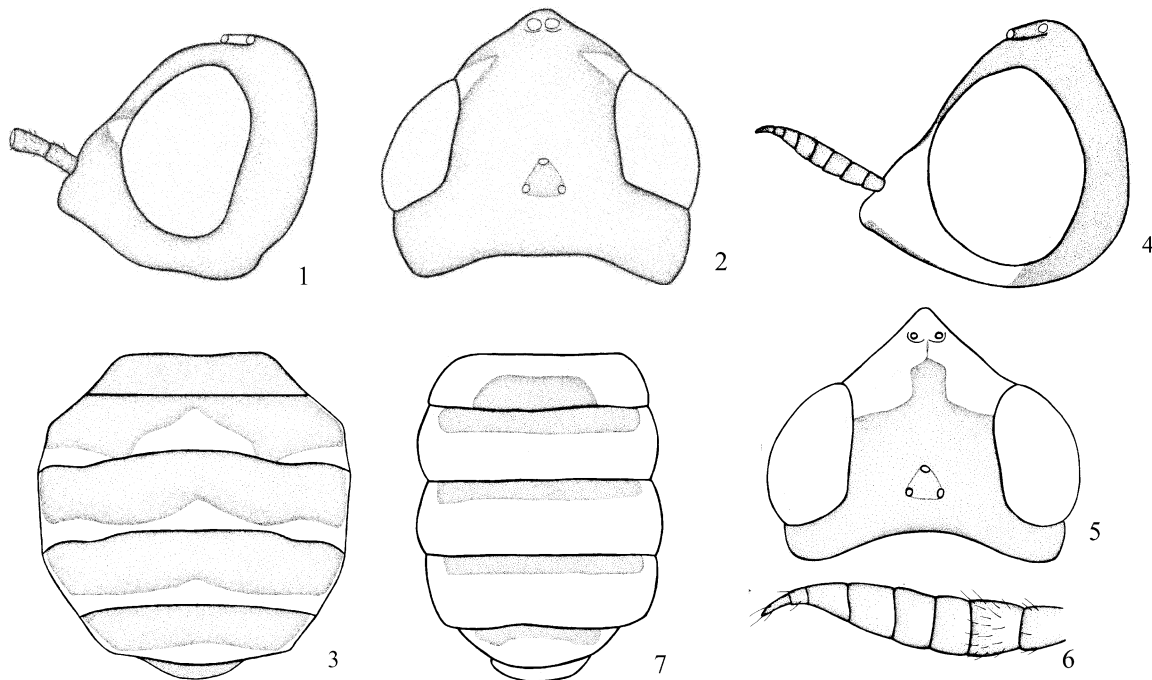
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Etymology. The specific name refers to the yellow face.

Remarks. This species closely resembles *N. nanshanicus* Pleske, but it may be separated from the latter

by the yellow pteropleuron and laterotergite (in *nanshanicus*, pteropleuron and laterotergite black) and the different coloration of legs (in *nanshanicus*, only hind tibia dark) (Lindner, 1937).



Figs. 1-3. *Nemotelus dissitus* sp. nov., female. Figs. 4-7. *Nemotelus faejflavus* sp. nov., female. 1, 4. Head, lateral view. 2, 5. Head, dorsal view. 3, 7. Abdomen, dorsal view. 6. Antenna, lateral view.

3 *Nemotelus ventiflavus* sp. nov. (Figs. 8-15)

Male. Body length 4.3 mm, wing length 3.8 mm.

Head black and pale gray pollinose; lower frons with a yellow median spot. Hairs on head pale. Eyes contiguous with short sparse hairs; upper facets larger than lower ones. Head 0.8 times higher than long; eye width equal to distance between antennae and median ocellus and 1.5 times that of frons just above antennae; frons width just above antennae 2.4 times that of ocellar triangle and 4.0 times that of frons at median ocellus. Antenna brown; scape, pedicel and last flagellomere with pale hairs; last flagellomere 0.3 times as long as rest of flagellum; antennal ratio: 1.0: 1.1: 4.5. Proboscis brown.

Thorax black and slightly pale gray pollinose; humeri yellow. Mesopleuron with upper margin yellow. Hairs on thorax pale. Legs black, but apical portion of femora yellow; fore and mid tibiae yellow, hind tibia brownish except base yellow; tarsi yellow. Hairs on legs pale. Wing hyaline; veins pale. Halter pale yellow except basal portion brownish yellow.

Abdomen pale yellow, but tergite 1 with one blackish transverse band on median portion and tergite 5 with one blackish transverse band on basal portion; sternite 1 with one blackish transverse band reaching lateral margins, sternite 5 with basal portion brownish yellow. Hairs on abdomen pale. Male genitalia (Figs.

14-15): Gonocoxite with long lateral projection; median process of hypandrium long with a very deep V-shaped concavity; aedeagal complex with median lobe shorter than lateral lobes.

Female. Unknown.

Holotype ♂, Hotan (1382 m), Xinjiang, 11 Sep. 1979, LI Fa-Sheng.

Distribution. China (Xinjiang).

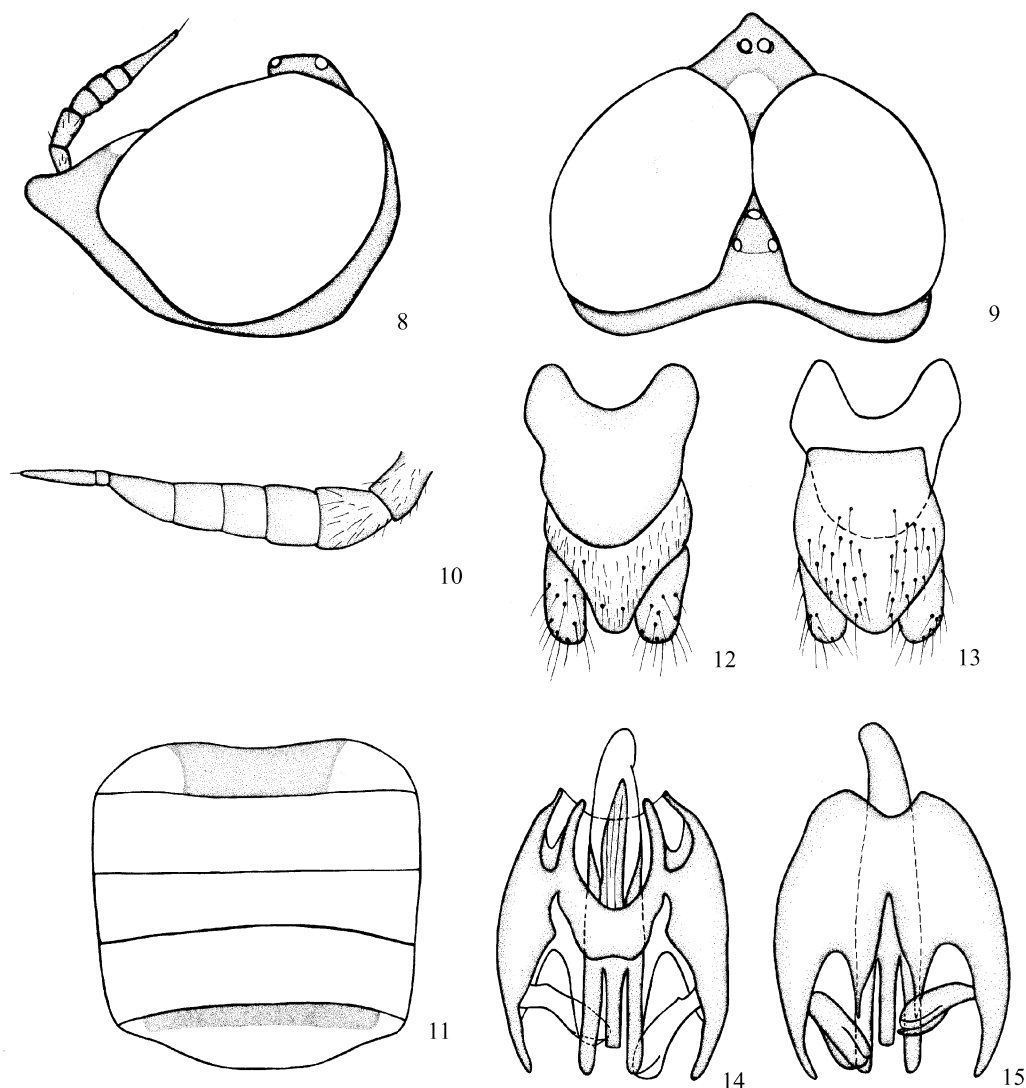
Etymology. The specific name refers to the yellow venter of the abdomen.

Remarks. This new species resembles *N. uliginosus* (Linnaeus), but it differs from the latter in the abdominal venter chiefly yellow (in *uliginosus*, abdominal venter chiefly black) and male eyes with short sparse hairs (in *uliginosus*, male eyes bare) (Rozkošný, 1983).

4 *Nemotelus xinjianganus* sp. nov. (Figs. 16-23)

Male. Body length 4.4 mm, wing length 3.5 mm.

Head black and pale gray pollinose; lower frons with yellow spot which is slightly extending downward along eye margin. Hairs on head pale. Eyes nearly contiguous, upper facets larger than lower ones. Head 0.9 times higher than long; eye width 0.9 times distance between antennae and median ocellus and 2.1 times that of frons just above antennae; frons width just above antennae 1.8 times that of ocellar triangle and 2.6 times that of frons at median ocellus. Antenna brown; scape, pedicel and apex of flagellum with pale hairs; last



Figs 8-15. *Nemotodus xinjianganus* sp. nov., male. 8. Head, lateral view. 9. Head, dorsal view. 10. Antennae, lateral view. 11. Abdomen, dorsal view. 12-13. Tergites 9-10 and cerci, dorsal and ventral views. 14-15. Genital capsule, dorsal and ventral views.

flagellomere 0.3 times as long as rest of flagellum; antennal ratio: 1.0:1.0:3.4. Proboscis brown.

Thorax black and slightly pale gray pollinose; humeri and postalar calli yellow. Upper portion of mesopleuron yellow; laterotergite with a small yellow spot on front portion. Hairs on thorax pale. Legs black, but trochanters and extreme base of femora yellow, apex of femora pale yellow; fore and mid tibiae brownish yellow to yellow; hind tibia with basal portion and apex yellow; tarsi yellow. Hairs on legs pale. Wing hyaline; veins pale. Halter with stem brown, knob pale yellow.

Abdomen pale yellow, but tergite 1 with one black transverse band. Hairs on abdomen pale. Male genitalia (Figs. 22-23): Gonocoxites with long acute lateral projections; median process of hypandrium short with a

short V-shaped concavity; aedeagal complex with median lobe shorter than lateral lobes.

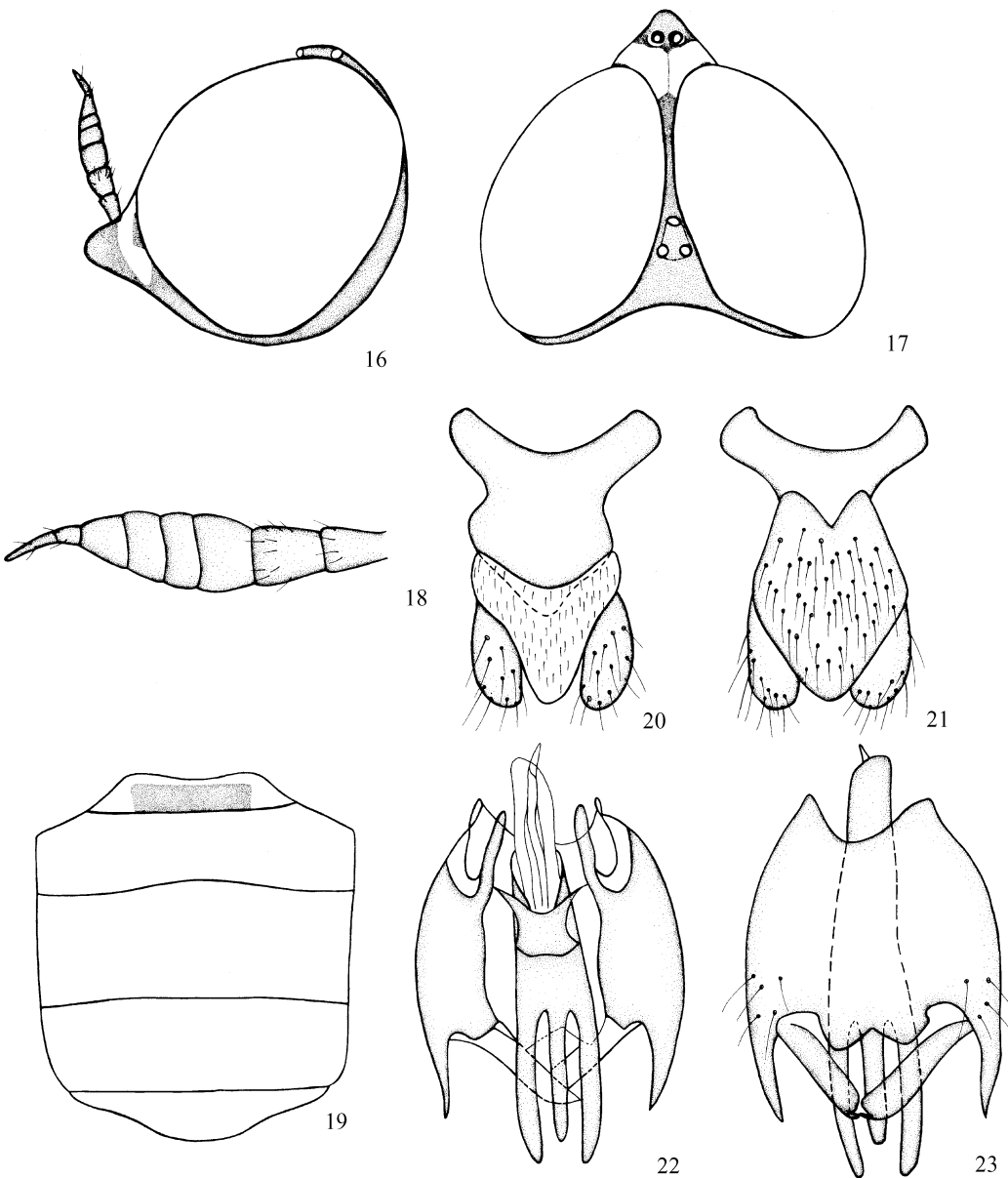
Female. Unknown.

Holotype ♂, Qura (1336 m), Xinjiang, 10 Sep. 1979, LI Fa-Sheng.

Distribution. China (Xinjiang).

Etymology. The specific name refers to the type locality Xinjiang.

Remarks. This species closely resembles *N. bomyensis* Pleske, but it differs from the latter in the following points: hypopleuron wholly black, laterotergite with one small yellow spot, and abdomen only with one black spot on tergite 1; in *bomyensis*, hypopleuron with yellow spot, laterotergite black, and abdomen with more black markings on dorsum and venter (Lindner, 1937).



Figs 16-23. *Nemotelus ventiflavus* sp. nov., male. 16. Head, lateral view. 17. Head, dorsal view. 18. Antenna, lateral view. 19. Abdomen, dorsal view. 20-21. Tergites 9-10 and cerci, dorsal and ventral views. 22-23. Genital capsule, dorsal and ventral views.

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中国线角水虻属四新种 (双翅目, 水虻科)

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摘要 记述线角水虻属4新种, 即离斑线角水虻 *N. dissitus* sp. nov., 黄颜线角水虻 *N. facflavus* sp. nov., 黄腹线角水虻 *N. ventiflavus* sp. nov. 和新疆线角水虻 *N. xinjianganus* sp. nov.。模式标本保存在中国农业大学昆虫博物馆。

1 离斑线角水虻, 新种 *Nemotelus dissitus* sp. nov. (图1~3)
新种与泥线角水虻 *N. uliginosus* (Linnaeus) 近似, 但喙短且末端有些钝, 雌性额有明显分开的黄斑。
正模 ♀, 副模1 ♀, 陕西甘泉, 1971.06.16~23, 杨集昆

* 通讯作者.

采。

词源：种名意指额斑明显分开。

2 黄颜线角水虻, 新种 *Nemotelus faciflavus* **sp. nov.** (图 4~7)

新种与南山线角水虻 *N. nan-shanicus* Pleske 近似, 但翅侧片和侧背片黄色, 足的颜色也明显不同。

正模 ♀, 新疆墨玉 (1 236 m), 1979-09-09, 李法圣采。

词源：种名意指颜黄色。

3 黄腹线角水虻, 新种 *Nemotelus ventiflavus* **sp. nov.** (图 8~15)

关键词 双翅目, 水虻科, 线角水虻属, 新种, 中国.

中图分类号 Q969.447.4

新种与泥线角水虻 *N. uliginosus* (Linnaeus) 近似, 但腹部腹面主要黄色, 雄性复眼有毛。

正模 ♂, 新疆和田 (1 382 m), 1979-09-11, 李法圣采。

词源：种名意指腹部腹面黄色。

4 新疆线角水虻, 新种 *Nemotelus xinjianganus* **sp. nov.** (图 16~23)

新种与波密线角水虻 *N. bomyensis* Pleske 近似, 但下侧片全黑色, 侧背片有黄斑, 腹部仅第 1 背板有黑斑。

正模 ♂, 新疆策勒(1 336 m), 1979-09-10, 李法圣。

词源：新种以模式产地命名。